

RALPH E. PETERSON

IBLA 85-835

Decided November 26, 1986

Appeal from a decision of the Wyoming State Office, Bureau of Land Management, rejecting oil and gas lease offer in part. W-95596.

Affirmed.

1. Oil and Gas Leases: Applications: Generally--Oil and Gas Leases:
Known Geologic Structure--Oil and Gas Leases: Noncompetitive
Leases

An applicant for a noncompetitive oil and gas lease who challenges a determination that certain lands are within the known geologic structure of a producing oil or gas field has the burden of establishing that the determination is in error. The determination will not be disturbed in the absence of a showing of error by a preponderance of evidence.

APPEARANCES: William T. Schwartz, Esq., Casper, Wyoming, for appellant; Lowell T. Madsen, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Denver, Colorado, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE GRANT

Ralph E. Peterson has appealed a decision dated June 28, 1985, of the Wyoming State Office, Bureau of Land Management (BLM), finding that 227.49 of the 520.92 acres sought in appellant's simultaneous noncompetitive oil and gas lease offer were within the Raderville Known Geologic Structure (KGS) and rejecting the offer as to those lands.

Appellant was the priority applicant for parcel No. WY-388 on the July 1983 Notice of Lands Available for Oil and Gas Filings. By memorandum dated June 22, 1984, the Casper District Manager advised the State Office that 454.46 acres of the lands embraced by the appellant's offer were within the Raderville KGS. Consequently, BLM issued Peterson a lease, serialized W-86857, for 66.46 acres not included in the KGS. Following appeal, the Board, by order dated February 21, 1985, remanded the case for further consideration at BLM's request. After further review, BLM revised the boundaries of the Raderville KGS with the result that only 227.49 acres of appellant's original offer were found to be within the KGS. By its decision of June 28, 1985, BLM

authorized issuance of a lease serialized W-95596, for 226.97 additional acres, but rejected the offer as to the following described lands:

Sixth Principal Meridian, Wyoming
T. 35 N., R. 88 W.
sec. 31, N 1/2 of Lot 7, lots 8, 11,
W 1/2 SE 1/4, containing 227.49 acres

BLM's reevaluation of the KGS was carried out by petroleum geologist R. E. Wymer. Wymer's May 13, 1985, report stated in part that the trend of the first and second Cody net reservoir isopachs seemed to conflict with the general northwest-southeast trend of the sand reservoirs of similar age, and that reservoir quality sands could be observed to trend at almost right angles to the overall sand trend. Wymer picked the +4,454 foot line of the first Cody structure contour map as the downdip limit of known oil accumulation because it represented the lowest elevation of both the first and second Cody sands from which production was occurring. In support of his conclusion, Wymer identified Conoco's Well No. 1, in N 1/2 SE 1/4 SE 1/4, sec. 36 T. 35 N., R. 89 W.

With the statement of reasons for appeal, appellant has submitted a report of consulting geologist Roger D. TeSelle disputing the Wymer conclusions. First, TeSelle contends that BLM's isopachs of the Cody sands do not agree with, and are in a direction contrary to, regional trends. Next, TeSelle charges that BLM ignored Conoco's #6 Unit well which was a dry hole (in section 31, T. 35 N., R. 88 W.) updip from the lands at issue. The TeSelle Report concludes:

[T]he new KGS outline has been drawn using trends which are in total conflict to regional trends and does not consider a well [the Continental #6 Unit Well] which was water wet in both Cody sands. Therefore, it is concluded that the KGS outline for Raderville field is improper.

In answer to appellant's statement of reasons, BLM has submitted the response of Wymer. Wymer points out that several fields (or portions thereof) in the area do not follow the northwest-southeast trend. Wymer supports his position concerning trends with reference to an article by Robert L. Brenner in The American Association of Petroleum Geologists Bulletin. 1/ Citing this source, Wymer contends: "This map [Figure 14] demonstrates 'clean' reservoir quality sands can be identified to trend at almost right angles to the general northwest-southeast trend. This demonstrates the potential for some northeast-southwest trending sand reservoirs of Upper Cretaceous age" (Answer at 3, emphasis in original). Further, Wymer contends that in revising the KGS he acknowledged the dry-hole status of the Conoco #6 well in lot 11, sec. 31, T. 35 N., R. 88 W., placing his lowest known oil

1/ Brenner, Sussex Sandstone of Wyoming--Example of Cretaceous Offshore Sedimentation, American Association of Petroleum Geologists Bulletin, Feb. 1978 at 181.

level at +4,454 feet, representing the lowest elevation of first Cody sand in which production is occurring (from Conoco's Well No. 1, N 1/2 SE 1/4 SE 1/4, sec. 36, T. 35 N., R. 89 W). This elevation, Wymer states, is 389 feet updip from Conoco's Well No. 6. Wymer contends the +4454 elevation projects across much of the southern portion of sec. 31 showing the lands in question are presumptively productive.

Appellant has submitted a rebuttal in which TeSelle restates his contention that the lands in issue are downdip from the oil-water contact established in Raderville field. For this reason, he finds it difficult to assume the lands are presumptively productive.

A KGS is defined as "technically the trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.0-5(1). A KGS designation recognizes the existence of a continuous entrapping structure on some part of which there is production. Lloyd Chemical Sales, Inc., 82 IBLA 182 (1984). Accordingly, it is not necessary that there be production within or in the immediate vicinity of land designated as part of a KGS, as long as the land is determined to be "presumptively productive" on the basis of geologic evidence of the existence of a productive structure underlying the land. See R. K. O'Connell, 85 IBLA 29 (1985).

[1] As one challenging a Departmental determination that land is within the KGS of a producing oil or gas field, appellant has the burden of showing the determination is in error by a preponderance of the evidence. See Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984); Thunderbird Oil Corp., 91 IBLA 195 (1986).

The Secretary has traditionally delegated the duty for determination of the existence and extent of a KGS to his technical experts and it is well established that this Board may rely on reports of the Secretary's technical experts. Ronald C. Agel, 87 IBLA 255 (1985); Woods Petroleum Co., 86 IBLA 46, 52 (1985); John P. Brogan, 85 IBLA 379, 383 (1985). In Champlin Petroleum Co., 86 IBLA 37, 40 (1985), we noted that "[w]hile the conclusions drawn from geological data are subject to different interpretations, the Secretary is entitled to rely upon the reasoned opinion of his technical expert in the field," citing Bruce R. Anderson, 63 IBLA 111 (1982). A determination by Departmental technical experts will normally not be set aside where it is not arbitrary or capricious, and is supported by competent evidence. Woods Petroleum Co., *supra* at 52; Davis Oil Co., 53 IBLA 62, 67 (1981).

The focus of the dispute in this case, as shown in the reports (including maps) of the BLM geologist, Wymer, and appellant's consulting geologist, TeSelle, involves the trend of the Cody sands. In accordance with the BLM analysis, the lands included in the KGS and rejected from appellant's lease offer lie updip from both the dry hole and the lowest elevation producing well in the Cody sands. In the projection used by appellant's consultant, this is not the case. Reviewing the evidence, we are unable to conclude appellant has shown by a preponderance of the evidence that the lands at issue are not properly included within the boundary of the KGS as revised.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

C. Randall Grant, Jr.
Administrative Judge

We concur:

Will A. Irwin
Administrative Judge

Gail M. Frazier
Administrative Judge

